



CITY OF PORTLAND ENVIRONMENTAL SERVICES



1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204 ■ Nick Fish, Commissioner ■ Michael Jordan, Director

October 23, 2015

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Northwest Region Cleanup Program
700 NE Multnomah St., Suite #600
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Subject: Review of revised *Stormwater Assessment for Source Control Evaluation* (dated September 22, 2015) and revised draft *Source Control Measure Implementation Plan* (undated) for the ODOT Facility in Portland Harbor

Dear Alex:

This letter provides comments from the City of Portland Bureau of Environmental Services to the Oregon Department of Environmental Quality (DEQ) based on our review of the above referenced documents (revised SWA Report and SCMIP) submitted by Herrera Environmental Consultants on behalf of the Oregon Department of Transportation (ODOT).

The City has multiple interests in ODOT's efforts to ensure that adequate source control measures are in place for ODOT discharges to Portland Harbor. ODOT facility elements within the harbor upland area include major transportation corridors that discharge stormwater to the Willamette River via a number of City outfalls. In addition, the City is one of several parties conducting a supplemental remedial investigation/feasibility study for the River Mile 11 East (RM11E) area, to which an ODOT outfall discharges.

While DEQ has indicated that no further revisions are planned for the SWA Report, certain information in the report warrants correction or clarification in future ODOT documents (such as the planned Effectiveness Monitoring Plan) and may have bearing on future ODOT data collection activities. The City offers the following comments on the revised SWA Report and SCMIP for DEQ's consideration.

Comments on the SWA Report

1. For the SWA as well as the planned source control measure (SCM) implementation and effectiveness monitoring, it is critical to identify whether the sampling locations represent treated or untreated stormwater discharge. The revised SWA Report contains some additional information on the location of stormwater treatment units within ODOT drainage basins but does not present clear information on the portion of drainage in a given basin that is subject to treatment. Specifically:
 - For WR-306 (I-5 and I-405 drainage to RM11E), Sections 3.2.2 and 4.2.2.1 of the report indicate that all runoff is treated from these ODOT elements to WR-306. This appears to be incorrect. Figure 3 indicates that a major branch connects to

the ODOT system downstream of the treatment unit (i.e., at manhole AQH727). In addition, Figure 3 doesn't show all mapped connections to the ODOT facility discharging to WR-306, including at least 6 connections from ODOT facilities to the trunk lines between the treatment unit and the outfall (see www.portlandmaps.com). Future documents should specify and depict exactly which portions of the WR-306 drainage basin do not discharge to the CDS treatment unit in this basin, and whether the proposed Portland Harbor-wide SCMs proposed by ODOT are planned for this non-treated drainage area.

- For Outfall 11, Table 2-1 and Section 3.3.2 imply that all of the ODOT facility contributions to OF-11 are treated in water quality swales. However, not all of the ODOT drainage to OF-11 is subject to treatment by the four City swales along Highway 26. Clarification is warranted in future documents.
2. The text of the report states that sample location WR-306-A is located immediately downstream of the CDS treatment unit (Section 3.2.2); however, it appears from Figure 3 that the sampling location is immediately upstream of the treatment unit. Future documents should be modified to state whether the data collected from WR-306-A represent treated or untreated runoff from this branch of the ODOT system. As noted above, this monitoring location does not represent all ODOT discharges to WR-306. If monitoring location WR-306-A represents treated runoff, then data collected from it are not representative of discharges from WR-306 to the river and may not be an acceptable indicator of whether or not additional source control measures are warranted in the WR-306 basin (i.e., measures may be needed in the untreated portions, which have not been characterized). The data presentation in Section 6.2.2 warrants additional review due to this concern.
 3. Significant data gaps exist in the characterization of stormwater discharging directly from the Fremont Bridge (i.e., data are limited to one sample). The forthcoming Effectiveness Monitoring Plan should include sampling to demonstrate that SCMs undertaken on the bridge are effective. This is important given that: (1) SCMs are proposed for the bridge due to elevated contaminant concentrations including PCBs; and (2) the bridge discharges directly to the river in the RM11E area, an area that is slated for remediation and for which PCBs have been identified as a risk driver.
 4. The City disagrees with the findings in Section 7 regarding I-5 and I-405, as they pertain to the east side (i.e., WR-306). The section identifies only four metals as a priority for source control. Limited data were collected from the Fremont Bridge which discharges to RM11E and the monitoring location utilized for the east side (WR-306-A) does not appear to include bridge contributions or to represent discharges from WR-306 (i.e., represents only the treated portion of WR-306 discharges; see Comments 1 through 3). The Fremont Bridge investigation identified PCBs and other contaminants in bridge coatings and PCBs have been identified by EPA as a pollutant of concern in river sediment in the vicinity of WR-306 (i.e., identified for Area of Potential Concern 25). The list of chemicals of interest for this drainage area should include PCBs.
 5. The level of detail provided in report figures is insufficient for evaluating data collected and proposed source control measures. Specifically:
 - In addition to the system overview figures, detailed figures should be generated for each ODOT facility drainage area that include all inlets and connections to

the ODOT system and flow directions in order to identify opportunities for implementing SCMs.

- Figure 2 (Monitoring Location OF-52A) incorrectly depicts storm lines, combined sewer lines, and sanitary lines, that are inside and outside of the storm drainage boundary for Outfall 52, as all being part of the OF-52 drainage. The inset showing the monitoring location does not clearly indicate that the location is upstream of stormwater treatment as described in the text.
- Figure 3 (Monitoring Location WR-306A) appears to indicate that the location represents only I-5 drainage, not I-5 and I-405 as described in the text.
- Figure 5 (Monitoring Location WR-307A): It is not clear whether samples were collected from one of four incoming lines to that location or from the outgoing line.
- Figure 9 (Monitoring Location OF-22C-A) indicates that the monitoring location may have included a portion of Forest Park drainage, possibly resulting in dilution of contaminant concentrations from the ODOT facility and low bias in this data set. Clarification is needed to indicate which line was sampled in order to determine how well data represent ODOT stormwater.
- Figure 12 (Monitoring Location WR-510A) depicts storm lines with no connections, lacks flow arrows to show direction, and does not show what line is equipped with stormwater treatment, making it difficult to confirm that all stormwater discharge to WR-510 is treated.

Comments on the SCMIP

6. The SCMIP includes a number of work elements with target deadlines that have already passed. The final document should indicate the current status of the SCM implementation and provide a clear schedule of proposed future work.
7. The first SCM identified for the Albina Georegion (p. 4 of the SCMIP) is a "source investigation into the Stanton Yards to determine whether there is an inadvertent connection to ODOT's storm system." In 2014, ODOT asked the City if the Stanton Yard (operated by the City's Bureau of Transportation [PBOT]) has any stormwater connections to ODOT's WR-306 conveyance system. In response, the City conducted a field investigation and confirmed that the Stanton Yard has connections only to the City's combined sewer system. The City conveyed the details of these findings and updated mapping to ODOT on September 30, 2014.¹ This task is complete and the proposed investigation of possible Stanton Yard connections to the ODOT system should be removed from the SCMIP.
8. To clarify the description of ODOT drainage in the Pearl Georegion, only a portion of ODOT stormwater discharge to Outfall 11 is treated by water quality swales (see Comment 1).
9. The first paragraph on p. 7 (recommendations for the St. Johns Georegion) refers to a Table 5-10 that "demonstrates effectiveness of the CDS Stormwater Treatment facility in reducing contaminant concentrations." The referenced table is not

¹ BES, 2014. Email to U. Janik (ODOT) from L. Scheffler (BES) RE: PBOT Follow Up. September 30, 2014.

attached to the SCMIP. Presuming this statement refers to stormwater data collected by ODOT to represent facility discharges from the St. Johns Bridge to OF-52, the SWA Report stated that the only monitoring location for this drainage area (site OF-52A) was located upstream of the CDS unit (see Section 3.1.3 of the SWA). It is unclear how the data could demonstrate effectiveness of the treatment unit.

10. The second paragraph on p. 7 states that if PCBs continue to be elevated in stormwater runoff from the St. Johns Bridge, ODOT will evaluate maintenance products used on the bridge as possible sources of PCBs. Note that the solids data collected in 2010 by the City in Basin 52 (including from ODOT Manholes 2 and 4) indicated that PCBs are present in solids at and downstream of the ODOT treatment facility in this basin. It is not clear why these data were not included in the summary table of solids data (Table C-3) in the SWA report.

Because PCBs are hydrophobic and these previous data indicated elevated PCBs in solids in the bridge runoff, ODOT should consider collection of solids samples for future source investigation and effectiveness monitoring of St. Johns Bridge runoff. Consideration should also be given to collecting stormwater data discharging both to and from the CDS treatment unit to characterize sources from the bridge and the effectiveness of the treatment unit for control.

The City appreciates the ongoing collaboration with DEQ on identifying and controlling contaminant sources in Portland Harbor. If you have any questions, please contact me at 503-823-2296.

Sincerely,



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Portland Harbor Program

c: Eva DeMaria / EPA
 Kim Cox / City of Portland
 Jeff Moore/ODOT